

immediate vicinity of the end, outside the body, of the access . The invention further relates to an infusion set and a dialysis probe comprising such a measuring device.--

IN THE CLAIMS

Please cancel original claims 1-7 and substitute new claim 8-20 as follows:

- 40057322E.0304.02
8. (New) A measuring device for measuring body fluids, comprising an access structure for accessing the interior of the body, said access structure having an end coupled to the measuring device, and a sensor to which the body fluid to be measured is supplied via said access structure, said sensor arranged on said measuring device outside the body, in the immediate vicinity of the end of said access structure.
  9. (New) The measuring device as set forth in claim 8, wherein said sensor is arranged such that it may be removed and replaced.
  10. (New) The measuring device as set forth in claim 8, wherein said access structure provides a fluid channel for providing a fluid flow, said device further comprising a valve means arranged in the fluid channel for preventing a reverse flow of fluid from said sensor into said access structure.
  11. (New) The measuring device as set forth in claim 8, further comprising an infusion set comprising a catheter head, wherein said sensor is arranged on the catheter head.
  12. (New) The measuring device as set forth in claim 8, further comprising an implanted dialysis probe having an outlet outside the body, wherein said sensor is arranged in the outlet.
  13. (New) An infusion set comprising a measuring device as set forth in claim 8.

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14. (New) A dialysis probe comprising a measuring device as set forth in claim 8.
15. (New) A dialysis probe comprising a probe head and access structure coupled to the probe head and comprising a supply tube and a discharge tube, at least a portion of the discharge tube lying outside a patient's body when in use and carrying a sensor.
16. (New) The dialysis probe according to claim 15, said probe head further comprising an inlet and an outlet, said inlet coupled to the supply tube, said outlet coupled to the discharge tube.
17. (New) The dialysis probe according to claim 16, the sensor adjacent to the coupling of the discharge tube and the outlet.
18. (New) The dialysis probe according to claim 17, wherein the sensor is immediately adjacent to the patient's body when the probe is in use.
19. (New) The dialysis probe according to claim 18, further comprising a reflux valve associated with the outlet.
20. (New) The dialysis probe according to claim 18, further comprising a valve associated with the outlet for selectively controlling the flow of dialysis fluid.